

1 **Gender Inequitable Norms and Its Associate Among University Students in**
2 **Southern Ethiopia**

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20 **Abstract**

21 **Background:** Inequitable gender norms characterize women as one who should be submissive
22 while promoting male dominance and toughness. For a society to achieve gender equality,
23 ensuring equitable gender norms is a basis. Little is known about inequitable norms and their
24 association in our context.

25 **Objective:** this study aimed to assess favorable attitudes towards gender inequitable norm and
26 responsive factors among university students

27 **Design:** An institution-based cross-sectional study was conducted among Arba Minch and Jinka
28 University students, in Ethiopia from October 25 to November 10, 2022.

29 **Methods:** A multi-stage sampling technique was used to select 615 students. The Gender
30 Equitable Men Scale tool was used to assess gender norm attitudes. Data were checked and
31 entered into Epi-Data Version 3.1 and analyzed using SPSS Version 25.0. Binary logistic
32 regression analysis was used to identify associated factors with gender inequitable norms.
33 Variables with a p-value <0.25 in bivariable logistic regression were candidates for multivariable
34 logistic regression. A multivariable logistic regression analysis was fitted to identify factors
35 associated with gender inequitable norms. A Hosmer–Lemeshow goodness-of-fit statistic was
36 used to check model fitness and was satisfied. Statistical significance was taken at a p-value of
37 0.05 or less.

38 **Result:** The mean score for favorable inequitable gender norm attitude was 61.38 (SD 8.36), and
39 44.1% (95% CI: 40.1%, 48.1%) of study participants had favorable inequitable gender norm
40 attitude. Being male (AOR= 1.75, 95%CI: 1.19, 2.56), the break-up of a romantic relationship
41 (AOR=2.10, 95% CI: 1.14, 3.99), and poor gender equality attitude (AOR= 3.14, 95% CI: 2.15,
42 4.58) were factors responsible for with favorable inequitable gender norm attitude.

43 **Conclusions:** A significant proportion of participants endorsed a favorable attitude toward
44 gender inequitable norms. Hence, the finding highlights the need to work rigorously by
45 addressing identified factors from all concerned bodies for enhancing equitable gender norms
46 among University students.

47 **Keywords:** Gender equality, Gender norm, Gender Inequitable norm, Inequitable, University
48 students.

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65 **Background**

66 The World Health Organization (WHO) defines gender as attributes and opportunities such as
67 economic, social, and political associated with being male and female. In a given cultural and
68 traditional context it is gender that determines what is norms, behavior, and roles for a woman or
69 a man. (1)

70 Men's and women's gender norm attitudes can be classified as equitable and/or inequitable.
71 The inequitable gender norm attitude has given women and men unequal power and
72 responsibilities. (2, 3)Such, gender norms that have given men dominance and toughness over
73 sexual activities have taken away control from women on their own reproductive and sexual
74 health rights and devastated their overall quality of life. (4, 5)

75 In countries where gender equality is not ensured, almost all practiced gender norms have
76 negative impacts like high maternal mortality and morbidity, teenage pregnancies, unintended
77 pregnancy, unsafe abortion, HIV/AIDS, perpetration of gender-based violence, and barriers to
78 the utilization of reproductive health services. (6, 7) Ethiopia is a country with high acceptance
79 of inequitable gender norms. According to the 2016 Ethiopian Demographic and Health Survey
80 report, 63% of women and 28% of men agree that beating a wife for any reason is justified. 8
81 Also, in Ethiopia, the prevalence of spousal physical, sexual, or emotional violence was 38%. (8)
82 Generally, women and girls face more gendered risks than their male counterparts, which
83 diminishes their social, educational, economic, and political opportunities. (9, 10)

84 The attitude an individual adopts through gender socialization regarding gender equity and
85 gender identity is fashioned by different factors that have diverse levels. These are macro-level
86 (socio-economic conditions, political and social structures), meso-level (family, peers, social
87 network, and institutions), and individual-level (sex, cognitive process, physical and sexual

88 maturation). (11) Gender socialization takes place either overtly or covertly in time and space
89 from birth to conform to pre-established norms. (12)

90 University students are believed to be individuals who go beyond their limits and have a
91 broader view of the world, the learning and teaching process they are passing through will help
92 them develop their solutions rather than being blindly attached to stereotypes. Also, they are the
93 future political, economic, social, and other activities leaders and players. It is highly important
94 to know favorable inequitable gender norm attitudes and factors associated with it to understand
95 the situation among this group. However, there is a dearth of evidence on inequitable gender
96 norm attitudes and responsible factors among university students in Ethiopia, especially in study
97 settings. Therefore, assessed inequitable gender norm attitudes and responsible factors among
98 Arba Minch and Jinka University students in Southern Ethiopia.

99 **Methods**

100 **Study design, period, and setting**

101 A school-based cross-sectional study was conducted at Arba Minch and Jinka University
102 students from October 25 to November 10, 2022. Arba Minch University is located in Arba
103 Minch town, which is located 505 kilometers. South West from Addis Ababa, the capital of
104 Ethiopia. The University has 12,633 undergraduate regular students and consists of the following
105 academic units; Arba Minch Institute of Technology, College of Natural Science, College of
106 Business and Economics, College of Medicine and Health Science, College of Social Science
107 and Humanities, and College of Agricultural Science. Jinka University is found in Jinka town,
108 South Omo Zone in the Southern part of Ethiopia. Jinka is located 737 KM south of Addis
109 Ababa, the capital city of Ethiopia. Currently, the University has a total of 4,385 students in the
110 regular program of 19 departments managed under five colleges namely the College of Social

111 Sciences and Humanities, Business and Economics, Agricultural Sciences, Computational and
112 Natural Sciences, and College of Health Science and School of Law. Students who attend their
113 studies at these Universities come from different parts of the country.

114 **Population**

115 All undergraduate students at Arba Minch and Jinka University were the source population.
116 Randomly Selected student from each department at Arba Minch and Jinka University was our
117 study population. Students who were on field practices during the study period, critically ill
118 students during the study period, and students on semester break during the study period were
119 excluded.

120 **Sample size determination and sampling procedure**

121 The sample size was calculated by considering the proportion of favorable attitudes toward
122 gender inequitable norms among students by using the single population proportion formula. The
123 assumptions considered for determination were: a 95% confidence interval, a 5% margin of
124 error, and since there was no previous study that addressed gender inequitable norms in the same
125 study groups, a 50% proportion of favorable attitude towards gender inequitable norms was used.
126 After considering a 1.5 design effect and 10% non-response rate, a sample of 635 students was
127 taken for conducting the study. Multi-stage sampling technique was used to select students from
128 Arba Minch and Jinka University. There are 69 and 19 departments in Arba Minch and Jinka
129 University, respectively. A total of 22 departments (17 from Arba Minch University and 5 from
130 Jinka University) were selected using the lottery method. A predetermined sample was
131 proportionally allocated to each selected department. Then, a sampling frame was generated for
132 each selected department considering the academic year of the students separately using
133 students' registration numbers. Finally, a total of 635 students were selected using a computer-

134 generated simple random sampling technique from each academic year from selected
135 departments.

136 **Variables**

137 Inequitable gender norm attitude was the dependent variable. Socio-demographic factors such as
138 age, sex, relationship status, marital status, field of study, year of study, place of residence before
139 university, type school attended at preparatory, and educational status of parents/guardians;
140 childhood experience factors such as childhood guardian, parental decision-making power, and
141 physical violence during childhood; behavioral factors such as substance use, and gender
142 equality attitude, and media related factors such as media usage, types of media, and youth club
143 participation were independent variables.

144 **Data collection tool and procedures**

145 A structured self-administered questionnaire was used to collect data on socio-demographic
146 characteristics, childhood experiences, behavioral factors, media usage, and gender equality
147 attitudes. The questionnaire was developed by reviewing different literature. (11, 12) It was
148 prepared in English first and then translated into the local Amharic language. Each participant
149 was informed and provided proper orientation on the purpose and objective of the study before
150 getting consent for the data collection. The questionnaire was administered to each study
151 participant after gathering the students in a classroom to avoid information cross-exchange and
152 supervisors closely supervised the overall data collection process daily.

153 A Gender Equitable Men scale developed by Pulerwitz and Baker (Pulerwitz& Baker, 2010) was
154 slightly modified to capture various psychometric domains on gender norms regarding GBV,
155 reproductive health and disease prevention, sexuality, domestic life, and childcare. This modified
156 scale was similar to that used in Ethiopia.(13) (14) An example of such minor changes was in

157 attitude statements about sexuality with a statement, “It is the man who decides what type of sex
158 to have” that was changed to “It is the man who decides when to have sex with a partner”. The
159 test for internal consistency has been measured by Cronbach’s alpha and yielded Cronbach’s
160 alpha test of 0.81 in Ethiopia. (14) Participants’ responses were scored as Agree =1; Partially
161 Agree =2; or Do Not Agree=3 for each of the items of GEM scale Score. For each participant,
162 responses to the GEM scales were added together to form a composite discrete variable that was
163 categorized into high inequity 24-39, moderate inequity 40-55, and low inequity 56-72.
164 Respondent was dichotomized using the mean score as the cut-off point, those who scored below
165 the cutoff point were categorized as having a favorable inequitable gender norm attitude. (15)

166 **Physical violence during childhood:** Six questions were asked about physical violence
167 which is defined as being slapped or having something thrown at you that could hurt, being
168 pushed or shoved, being hit with a fist or something else that could hurt, ever being jerked,
169 hauled or beaten, and/or ever been threatened with gun/knife or other weapon. A student is said
170 to have physical violence when he responds to at least one of the questions or more from birth up
171 to 18 years.

172 **Household decision-making power:** comprises six questions that were used to construct a
173 composite score. Each question has three response options on the degree of women’s
174 involvement in decision-making (another family member, joint, and self) in the home during
175 childhood experience. Based on the responses, each question was scored as follows: Another
176 family member (including the father only) decides the score = 0, the Joint decision-making score
177 =1, and the woman (mother) only decides the score =2. After computing altogether, a score
178 above the mean was said to have good decision-making power. (16)

179 **Gender equality attitude:** Gender equality attitude was evaluated based on the responses of
180 the participants to six questions that were specific to this topic. First, negatively stated questions
181 were reverse-coded during data processing. Then, it was summed up and a score above the mean
182 was said to have good knowledge about gender equality.

183 **Data quality assurance**

184 A structured questionnaire was prepared initially in English and translated to Amharic, and then
185 it was back-translated to English by different translators to check for any inconsistencies during
186 translation. The 24 questions of the gender equitable men scale were validated in most sub-
187 Saharan countries to assess attitudes toward gender norms. The tool was validated in Ethiopia by
188 Horizons research. (17) Before data collection, the internal consistency of the scale was checked
189 on 10% of the sample (64 students) at Wolaita Sodo University and found with Cronbach's alpha
190 test of 0.78. The overall activity of data collection was supervised by supervisors. The collected
191 data was reviewed and checked for completeness, and consistency before data entry.

192 **Data processing and analysis**

193 Following data collection, data were checked and entered into Epi-data software version 3.1 and
194 then exported to the SPSS version 25 statistical package for data cleaning and analysis.
195 Descriptive statistics were computed for all variables according to their nature. For continuous
196 variables, mean/median, and standard deviation/interquartile range were produced, while
197 categorical variables were assessed by computing frequencies and proportions. Response to
198 gender inequitable norms was stratified by sex to see the difference between male and female
199 students and to determine the statistical difference using a chi-square test.

200 To identify factors associated with favorable inequitable gender norms attitude binary logistic
201 regression model was employed. Crude Odds Ratios (COR) along a 95% confidence interval

(CI) were used to present the results of the bivariable analysis. An enter method was used to fit a multivariable logistic regression model to identify independent factors of favorable attitudes towards gender inequitable norms. The strength of association was determined by Adjusted Odds Ratio (AOR) and reported with a 95% CI. p-value <0.05 was taken as a cutoff point to declare statistical significance. The Hosmer–Lemeshow goodness-of-fit statistic was satisfied at p-value =0.39. Multi-collinearity among covariables was checked by looking at the variance inflation factor (VIF) score, and the highest observed VIF value was 2.37, indicating no threat of multicollinearity.

210 **Result**

211 **Socio-demographic and economic characteristics**

212 A total of 615 students completed the questionnaire in the current study, yielding a response rate
 213 of 97%. The mean age of respondents was 22.45 (SD= ±2.46), and most of them, 491 (79.2 %),
 214 belong to the age group 21-25. In this study, 239 (39%) participants were female. Of the study
 215 participants, 80 (13%) were married and 115 (18.7%) claim to be in a relationship currently,
 216 whereas 92 (15%), had a romantic relationship breakup (**Table 1**).

217 **Table 1:** Socio-demographic characteristics of study participants at Jinka and Arba Minch
 218 University, Southern Ethiopia, 2022

Variables	Category	Frequency (n)	Percent (%)
Age (in year)	=<20	81	13.2
	21-25	491	79.2
	>25	43	7.0
Sex	Male	376	61.0
	Female	239	39.0
Marital status	Married	80	13.0
	Never married	535	87.0

Relationship status	In relationship	115	18.7
	Was in relationship	92	15.0
	Never in relationship	328	53.3
Field of study	Social science	214	34.8
	Natural science	401	65.2
Year of Study	First-year	83	13.5
	Second year	198	32.2
	Third year	253	41.1
	Four and above	81	13.2
Place of residence before university	Urban	369	60.0
	Rural	246	40.0
School attended at preparatory	Private	117	19.0
	Public	498	81.0
Mother's educational status*	No formal education	196	31.9
	Primary	227	36.9
	Secondary	82	13.3
	Above secondary	110	17.9
Father's educational status**	No formal education	162	26.3
	Primary	159	25.9
	Secondary	105	17.1
	Above secondary	181	30.7

219 **Mother means the women the participant called as mother when they were growing up, if they*
220 *had one; **Father means the men the participant called as father when they were growing up, if*
221 *they had one.*

222 **Childhood Experience**

223 From participants, 485 (78.9%) of respondents claim to have grown up with both parents as
224 guardians. More than half, 343 (55.8%), of the study participants grew up in a house where the
225 mother's decision-making power is poor/low or in a house where the father is the head of the
226 household. In this study, 39.5% of participants said large household purchase is done by father-

227 only students whereas 76% of participants said it was their mothers who made small purchases
 228 most of the time. From study participants, 286 (46.5%) respondents reported that they had
 229 experienced at least one form of physical violence during their childhood. From these, 57 (9.3%)
 230 reported being threatened by a gun, knife, or wood at least once during their childhood.

231 **Behavioral related characteristics**

232 Almost two-fifths of the participants 237 (38.7%) claimed that they had used alcohol (alcoholic
 233 beverage drinks including local alcohol) in their lifetime, out of these more than one-third 217
 234 (35.3%) are current alcohol users, of which 17 (2.8%) use alcohol daily (**Table 2**).

235 Table 2: Behavioral characteristics of study participants at Jinka and Arba Minch University
 236 student Ethiopia, 2022

Variables	Categories	Frequency (n)	Percent (%)
Ever used alcohol	Yes	237	38.7
	No	377	71.3
Current alcohol use (in the past 12 months)	Yes	217	35.3
	No	21	3.4
Frequency of alcohol use	Daily	17	2.8
	Once/twice per week	46	7.5
	Once/twice per month	69	11.2
	Once/twice per year	85	13.6
Ever used chat	Yes	129	30.5
	No	294	69.5
Current chat chewing (in the past 12 months)	Yes	48	7.8
	No	10	1.6
Ever used cigarette	Yes	36	5.9
	No	579	94.1

Current cigarette smoking (in the past 12 months)	Yes	27	4.4
	No	9	5.9

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238 **Attitude towards Gender Equality**

239 Nearly half, 291 (47.3%), of the participants scored below the mean score of 7 and had poor
 240 attitudes towards gender equality. Out study participants, 98 (15.9%) of students do not believe
 241 all women are equal to men.

242 **Media-related characteristics**

243 More than half of the participants 481 (78.2%) had information about gender equity in media. Of
 244 those, 149 (24.2%) of participants claim the school is the main source of information on gender
 245 equity. Furthermore, 220 (35.8%) were participating in youth clubs.

246 **Attitude towards Gender Inequitable Norms**

247 In the current study, the mean score for the gender inequitable men scale was 61.38 (SD= ±8.36).
 248 From the study respondents, 271 (44.1%) (95% CI: 40.1%, 48.1%) participants scored below
 249 mean value and had favorable attitudes towards gender inequitable norms.

250 **Item Score of GEM scale for Female and Male students.**

251 In the Chi-square test, a statistically significance difference was observed in domestic life and
 252 child care, reproductive health and disease prevention, and sexuality domain between male and
 253 female students. In the violence domain, almost half of the students, 48.7% female and 45.1%
 254 male students agreed either totally or partially that “a woman should tolerate violence to keep her
 255 family together”. Similarly, in the domestic and childcare domain more than half of students,
 256 56.9% female and 61.4% male students, agreed either totally or partially that “a woman should
 257 obey her husband in all things”. In the reproductive and disease prevention domain, nearly one-
 258 third, 28.8% of female and 36.4% of male students agreed totally or partially that “it is a

259 woman’s responsibility to avoid getting pregnant”. In the sexuality domain for the statement
 260 “men need more sex than women do” 43.9% of female and 49.0% of male students agreed either
 261 totally or partially (**Table 3**).

262 **Table 3:** Scores of the Gender-Equitable Men Scale questions by sex of study participants at
 263 Jinka and Arba Minch University, Southern Ethiopia, 2022

Survey questions	Responses	Female		Male		P-value
		Total	Percent	Total	Percent	
Violence Domain						
There are times when a woman deserves to be beaten	Totally agree	31	13.0	57	15.2	0.72
	Partially agree	56	23.4	82	21.8	
	Disagree	152	63.6	237	63.0	
A woman should tolerate violence in order to keep her family together	Totally agree	57	23.8	112	29.8	0.27
	Partially agree	51	21.3	79	18.9	
	Disagree	131	54.8	193	51.3	
It is okay for a man to hit his wife if she won’t have sex with him	Totally agree	18	7.5	36	9.6	0.68
	Partially agree	28	11.7	43	11.4	
	Disagree	193	80.8	297	79.0	
It is alright for a man to beat his wife if she is unfaithful	Totally agree	31	13.0	62	16.5	0.27
	Partially agree	40	16.7	73	19.4	
	Disagree	168	70.3	241	64.1	
If someone insults a man, he should defend his reputation with force	Totally agree	21	8.8	40	10.6	0.72
	Partially agree	31	13.0	51	13.6	
	Disagree	187	78.2	285	75.8	
If he has to a man using violence against his wife is a private matter that shouldn’t be discussed outside	Totally agree	44	18.4	75	19.9	0.74
	Partially agree	54	22.6	76	20.2	
	Disagree	141	59.0	225	59.0	
Domestic Life and Childcare Domain						
A man should have the final word on decisions in his home	Totally agree	45	18.8	102	27.1	0.05
	Partially agree	68	28.5	91	24.2	

	Disagree	126	52.7	183	48.7	
A woman's most important role is to take care of her home and cook for her family	Totally agree	27	11.3	69	18.4	
	Partially agree	66	27.6	104	27.7	0.05
	Disagree	146	61.1	203	54.0	
Giving the kids a bath and feeding the kids are only the mother's responsibility	Totally agree	38	15.9	62	16.5	
	Partially agree	62	25.9	136	36.2	0.02
	Disagree	139	58.2	178	47.3	
A woman should obey her husband in all things	Totally agree	67	28.0	114	30.3	
	Partially agree	69	28.9	117	31.1	0.54
	Disagree	103	43.1	145	38.8	
A man should not take his child to the clinic without the child's mother	Totally agree	22	9.2	34	9.0	
	Partially agree	18	7.5	38	10.1	0.56
	Disagree	199	83.3	304	80.9	
Reproductive health and disease prevention Domain						
It is a woman's responsibility to avoid getting pregnant.	Totally agree	26	10.9	50	13.3	
	Partially agree	37	17.9	87	23.1	0.03
	Disagree	176	73.6	239	63.6	
A real man produces a male child.	Totally agree	17	7.1	33	8.8	
	Partially agree	14	5.9	35	9.3	0.21
	Disagree	208	87.0	308	81.9	
Only when a woman has a child is she a real woman.	Totally agree	13	7.1	30	8.0	
	Partially agree	12	5.9	41	10.9	0.02
	Disagree	214	87.0	305	81.1	
Women who carry condoms on them are easy.	Totally agree	25	10.5	41	10.9	
	Partially agree	31	13.0	63	16.8	0.42
	Disagree	183	76.6	272	72.3	
A man should be outraged if his wife asks him to use a condom.	Totally agree	16	6.7	22	5.9	
	Partially agree	24	10.0	46	12.2	0.66
	Disagree	299	83.3	308	81.9	
Real men do not immediately go a doctor when they are sick	Totally agree	14	5.9	34	9.0	
	Partially agree	17	7.1	44	11.7	0.048

	Disagree	208	87.0	298	79.3	
Sexuality Domain						
Men need more sex than women do	Totally agree	50	20.9	83	22.1	
	Partially agree	55	23.0	101	26.9	0.44
	Disagree	134	56.1	192	51.0	
You don't talk about sex; you just do it	Totally agree	31	13.0	36	9.6	
	Partially agree	35	14.6	67	17.8	0.29
	Disagree	173	72.4	273	72.6	
Men are always ready to have sex	Totally agree	35	14.6	65	17.3	
	Partially agree	68	28.5	88	23.4	0.32
	Disagree	136	56.5	223	59.3	
It is the man who decides when to have sex with a partner	Totally agree	17	7.1	26	6.9	
	Partially agree	20	8.4	70	18.6	0.002
	Disagree	202	84.5	280	74.5	
Men need other women even if the things with his wife are fine	Totally agree	14	5.9	27	7.2	
	Partially agree	19	7.9	44	11.7	0.24
	Disagree	206	86.2	305	81.1	
Employed women do not make a good wife	Totally agree	13	5.4	23	6.1	
	Partially agree	21	8.8	41	10.9	0.64
	Disagree	205	85.8	312	83.0	
A woman should not initiate sex	Totally agree	16	6.7	51	13.6	
	Partially agree	31	13.0	49	13	0.03
	Disagree	192	80.3	276	73.4	

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265 **Factors associated with favorable attitudes toward gender equitable norms**

266 In bivariable logistic regression analysis, sex, relationship status, the field of study, year of study,
 267 residence before university enrolment, type of school attended before university, mother's
 268 educational status, father's educational level, physical violence during childhood, Khat use, and

269 attitude toward gender equality were associated with a favorable attitude toward gender
 270 inequitable norms at p-value <0.25 and entered into multivariable logistic regression analysis.

271 After controlling the confounding effect in multivariable logistic regression analysis, sex,
 272 romantic relationship break-up, and attitude toward gender equality were statistically associated
 273 with favorable attitudes toward gender equality at p-value <0.05.

274 The odds of a favorable attitude toward inequitable gender norms were 1.75 times higher
 275 among male students than female students (AOR=1.745; 95%CI: 1.19-2.56). The odds of a
 276 favorable attitude towards inequitable gender norms were nearly two-fold higher among those
 277 who had broken romantic relationships as compared to their counterparts (AOR=2.10, 95%CI=
 278 1.14, 3.99). The odds of favorable attitude towards gender inequitable norms were 3.14 times
 279 greater among those with poor attitudes about gender equality than their complements
 280 (AOR=3.14, 95%CI= 2.15-4.58) (**Table 4**).

281 **Table 4:** Bivariable and multivariable logistic regression analysis for factors associated with
 282 favorable attitude toward gender inequitable norms among Jinka and Arba Minch
 283 University students, Southern Ethiopia, 2022

Variables	Attitude toward Gender inequitable norm		COR (95% CI)	P-value	AOR (95% CI)	P-value
	Favorable n (%)	Unfavorable n (%)				
Sex						
Male	184 (48.9)	192 (51.1)	1.67 (1.20-2.33)	0.02	1.74 (1.19-2.56)	0.004
Female	87 (36.4)	152 (63.6)	1		1	
Relationship status						

In relationship	43 (37.4)	72 (62.6)	1		1	
Broken relationship	53 (57.6)	39 (42.4)	2.27 (1.30- 3.98)	0.004	2.09 (1.14-3.88)	0.018
Never in relationship	135 (41.2)	193 (58.8)	1.17 (0.75-1.82)	0.48	0.96 (0.58-1.59)	0.89
Field of study						
Social	113 (52.8)	101 (47.2)	1		1	
Natural	158 (39.4)	234 (60.6)	0.58 (0.42-0.81)	0.001	0.76 (0.49-1.17)	0.22
Year of study						
First	40 (48.2)	43 (51.8)	0.86 (0.47-1.59)	0.64	1.28 (0.61-2.65)	0.51
Second	80 (40.4)	118 (59.6)	0.63 (0.37-1.06)	0.08	1.03 (0.52-1.93)	0.99
Third	109 (43.1)	144 (56.9)	0.70 (0.43-1.16)	0.17	0.89 (0.48-1.62)	0.69
Fourth and above	42 (51.9)	39 (48.1)	1		1	
Residence prior to University enrollment						
Urban	141 (38.2)	228 (61.8)	1		1	
Rural	130 (52.8)	116 (47.2)	1.81 (1.31-2.51)	<0.001	1.43 (0.89-2.27)	0.13
Types of secondary school attended						
Private	39 (36.4)	68 (63.6)	1		1	
Public	232 (45.7)	276 (54.3)	1.47 (0.95-2.25)	0.08	0.97 (0.56-1.69)	0.97
Mother educational status						
No formal education	97 (49.5)	99 (50.5)	1.71 (1.06-2.76)	0.03	0.98 (0.45-2.14)	0.95
Primary	102 (44.9)	125 (55.1)	1.43 (0.89-2.28)	0.14	1.11 (0.56-2.18)	0.76

Secondary	32 (39.0)	50 (61.0)	1.12 (0.62-2.02)	0.71	1.35 (0.66-2.75)	0.41
Above secondary	40 (36.4)	70 (63.6)	1		1	
Father educational status						
No formal education	76 (46.9)	86 (53.1)	1.77 (1.15-2.72)	0.01	1.42 (0.68-2.98)	0.35
Primary	86 (54.1)	73 (45.9)	2.36 (1.53-3.64)	<0.001	1.64 (0.85-3.16)	0.14
Secondary	46 (43.8)	59 (56.2)	1.56 (0.93-2.54)	0.08	1.12 (0.59-2.12)	0.73
Above secondary	63 (33.3)	126 (66.7)	1		1	
Physical violence experience during childhood						
Yes	141 (49.3)	145 (50.7)	1.48 (1.08-2.05)	0.02	1.32 (0.89-1.95)	0.16
No	130 (39.5)	199 (60.5)	1		1	
Attitude toward gender equality						
Poor	175 (60.1)	116 (39.9)	3.58 (2.56-2.05)	<0.001	3.14 (2.15-4.58)	<0.001
Good	96 (29.6)	228 (70.4)	1		1	
Ever used chat						
Yes	34 (58.6)	24 (41.4)	1.91 (1.10-3.31)	0.02	1.57 (0.82-3.01)	0.17
No	237 (42.5)	320 (57.5)	1		1	

284

285

286 **Discussion**

287 This study aimed to assess the prevalence of favorable attitudes toward gender inequitable norms

288 and its association as well as differences in gender inequitable norms of university students by

289 sex in Southern Ethiopia. Accordingly, 44.1% of study participants had favorable inequitable
290 gender norm attitudes. Being male, having romantic relationship breakup, and having poor
291 gender equality attitudes were associated with favorable attitudes toward gender inequitable
292 norms. Except in the violence domain, statistically significant differences in gender inequitable
293 norms between male and female students were observed in domestic life and child care,
294 reproductive health and disease prevention, and sexuality domains.

295 In this study, the mean score for the GEM scale is 61.38 (SD \pm 8.36) which indicates most of
296 our study participants are either in moderate or high equity based on the standard classification.
297 (18) The higher score in this study could be due to educational effect. Education has been
298 highlighted to influence gender socialization highly. (15, 19-21)

299 The current study revealed that 44.1% of study participants had a favorable attitude toward
300 gender inequitable norms. This finding follows a study conducted among Congolese which
301 showed nearly 50% favorable attitude toward gender inequitable norms. (15) The finding
302 implies that there is still a significant proportion of university students upholding stereotypical
303 attitudes towards gender norms.

304 In this study, the difference was observed in household and child care, reproductive and
305 disease prevention, and sexuality domain between male and female students toward gender
306 inequitable norms. This finding is in line with a finding from Turkey University students. (22)
307 Additionally, in this study male students supported inequitable gender norms in 23 items out of
308 24 items as compared to female students. In contrast, a study in Tanzania reported that women
309 supported gender inequitable norms in 21 items out of 24 items. (23) Similarly, a study from
310 Congo revealed that women supported more inequitable gender norms than their counterparts.
311 The finding from Congo justified that the support for gender inequitable norms by women is due

312 to their constant experience of unequal power relationships. (15) Partly, this discrepancy could
313 be from differences in method. A study conducted in Tanzania was done on a project working on
314 channeling men's positive involvement response to HIV/AIDS. (23) The other possible
315 explanation could be the difference in the study population. The latter study was conducted
316 among the adult married population. Marriage is a potential factor that affects gender
317 socialization towards an egalitarian gender view mainly among men. Recent studies showed due
318 to the influx of women in the workforce and the need for sharing household expenses, the
319 majority of husbands believed in equitable norms. (24, 25)

320 This study attested that a significant proportion of study participants accepted violence in
321 intimate relationships, though there was no statistically significant difference based on sex. This
322 finding is in line with a study reported from Zambia. (26) However, a study from Nigeria
323 reported a statistically significant difference in participants' acceptance of violence in intimate
324 relationships based on sex. (27) In this study, 37% of male and 36.4% of female students agreed
325 either totally or partially with the statement "There are times when a woman deserves to be
326 beaten". A comparable proportion is reported from Uganda with 37% of females and 40% of
327 males agreeing either totally or partially. (28) Also, a study from Tanzania reported comparable
328 proportions. (29) However, a higher proportion was seen in Ethiopia, Zambia, and Congo. (14,
329 15, 26) In the current study, 48.7% of male and 45.1% of female participants agreed either partial
330 or total "a woman should tolerate violence to keep her family together". Similarly, a study in
331 Ethiopia reported 50% acceptance of violence in intimate relationships. (14) In Congo, 49.2% of
332 men and 29.3% of women participants were in agreement with the above statement. (15)

333 The acceptance of violence and inequitable gender norms by university students implies that
334 more than challenging the established gender norms, they prefer to accept and internalize the

335 patriarchal view. (30) This finding indicates the potential to engage in or experience Gender
336 Based Violence (GBV) in future intimate relationships. As social theorists explained gender
337 socialization starts from birth learning how to be masculine or feminine from the environment
338 around them and such norms get more solidified after adolescence. (12, 19, 31) Hence, this
339 study participants are not an exception. According to the Ethiopian Demographic and Health
340 Survey (EDHS) report, 63% of women and 28% of men agree that beating a wife for any reason
341 is a norm. (8)

342 In the current study, a significant difference in domestic and childcare domain inequitable
343 gender norms was observed based on sex. When compared with other domains, the more
344 inequitable norm was reported in this domain. This was supported by a study conducted in
345 Zambia, where high endorsement of items related to roles within the household was reported.
346 (26) The most endorsed inequitable item in domestic life and childcare domain is “a woman
347 should obey her husband in all things”. Similarly, another study in Ethiopia reported that 50% of
348 participants agreed that women should obey their husbands in all things. (14) The finding is also
349 consistent with a study reported from Zambia and Congo. (15, 26) In this study, bathing the kids
350 and feeding the kids are only the mother’s responsibility was endorsed by 52.7% of male and
351 41% of female students. In contrast, a higher number was observed in Zambia and Uganda. (26,
352 28) Endorsement of gendered norms regarding domestic and childcare domain by students
353 implies that students internalized caring for kids and making a home is a woman’s duty. This
354 might restrict females from further advancing their education and financial freedom in future life.

355 Support for inequitable gender norms attitude is also seen in the sexuality domain. In the two
356 items, a significant difference is observed based on sex. However, studies from Nigeria and
357 Uganda reported no difference. (27) The most endorsed item in the sexuality domain is found to

358 be “men need more sex than women do” which is endorsed by 49.0% of male and 43.9% of
359 female students. Endorsement of traditional masculinity norms in sexuality prescribing male
360 dominance, males need more sex and are ready for sex indicating a potential for unsafe sexual
361 behavior and lower rates of sexual satisfaction. Conversely, females who are often under
362 constant burden have conformed to inequitable norms of subservience, thus restriction their
363 choice, and sexual decision-making. (19)

364 In this study, a significant difference was observed in the reproductive health and disease
365 prevention domain based on sex. The finding showed that the statement “It is a woman’s
366 responsibility to avoid getting pregnant” was endorsed by 36.4% of male and 28.8 % of female
367 students. This finding is in line with a study reported from Congo. (15) In India, a similar report
368 stated women are responsible for using contraceptives. (29)

369 In the current study, the odds of a favorable attitude towards inequitable gender norms were
370 nearly two-fold higher among male than their counterpart female students. This implies
371 stereotypical attitudes towards gender equity are still common among male students. The
372 possible explanation could be due to differences in the gender socialization process. Males are
373 taught and pressured from an early age to be strong, self-governing, and controlling.
374 Additionally, those males who adopt and demonstrate equitable gender norms face stigma and
375 mockery by their parents, peers, and society in general than females. (19, 31, 32) This finding is
376 confirmed by studies reported from Uganda, Turkey, India, Jordan, China, Mexico, and Europe.
377 (19, 22, 33-35) However, a study from Tanzania and Congo reported the odds of inequitable
378 norms to be higher among women participants. (15, 29) Another study from Tanzania negatively
379 moderately correlated suggesting being a female leads to a decrease in the level of equity. (23)
380 The implication is endorsing stereotypical gender norms that encourage male dominance are

381 associated with inequitable gender attitudes such as substance use, violence, delinquency, lower
382 male engagement in caregiving and household chores, unsafe sexual behavior, and perpetration
383 of intimate partner violence. (35)

384 In this study, the odds of a favorable attitude towards inequitable gender norms are higher
385 among students who had broken romantic relationships. It could be reason out that the decision
386 to end the relationship might be due to intimate partner violence (physical or sexual), which
387 might in turn affect the gender socialization process. (27) Studies suggest relationship breakup
388 results in violent behavior, decreased self-worth, and social respect. (19, 36) Similarly, a
389 Congolese study reported single women and men achieved high GEM scale scores, suggesting
390 that those who may not have experienced a long-term serious relationship might have not been
391 exposed to unequal power relationships. (15) Another study from Spain, reported males in
392 intimate relationship experience predicted stronger endorsement of inequitable attitudes. (37)

393 Gender equality attitude assessed by equality in terms of natural equality, equality in
394 political participation, equality in financial management, equality in household activity, and
395 equality in education, show statically significant association with favorable gender inequitable
396 norms. Those participants with lower gender equality attitudes had nearly four times higher odds
397 of having favorable inequitable gender norm attitudes. Attitude to gender equality is a strong
398 determinant of gender norms socialization. It could be the negative attitude about gender equality
399 they have, affected acceptance of equitable gender norms. The study conducted in Congo
400 confirms our findings of a strong association between attitudes to gender equality and the GEM
401 scale score. (15)

402 **Limitations of the study**

403 The student may not adequately represent the cultural, social, and religious diversity among
404 Ethiopians. Some sensitive questions in the sexual domain in GEMS and substance use might
405 introduce social desirability bias. On the other hand, there could be a recall bias because when
406 asked to recall their childhood experience on physical violence, women's autonomy, and others.
407 Also, the study didn't investigate the influence of stereotypic and prejudiced attitudes by
408 lecturers on students.

409 **Strengths and Limitations**

410 This is one the few studies that has been conducted among university students assessing attitudes
411 towards gender inequitable norms, in Ethiopia. The other strength of this study is adequate
412 representation of female students. When interpreting the finding of the present study, the
413 following limitations should be considered; the student may not adequately represent the
414 cultural, social and religious diversity among Ethiopians. Some sensitive questions in sexual
415 domain in GEMS and substance use might introduce social desirability bias. On the other hand,
416 there could be a recall bias because when asked to recall their childhood experience on physical
417 violence, women's autonomy and other

418 **Conclusion**

419 The achievement of gender equality in our society requires gender-equitable norms for its
420 members. The current study revealed a significant proportion of inequitable gender norm
421 attitudes, specifically male students had a more favorable attitudes towards gender inequitable
422 norms in each domain (violence domain, domestic and child care domain, sexuality domain, and
423 reproduction and disease prevention domains). The responsible factors for favorable gender
424 inequitable attitudes were sex, relationship breakup, and attitude towards gender equality. In one

425 or another ways these factors have an effect on the process of gender socialization paving the
426 way to inequitable gender norm attitudes.

427 **List of Abbreviations**

428 AIDS: Acquired Immune Deficiency Syndrome, AOR: Adjusted Odds Ratio, CI: Confidence
429 Interval, GBV: Gender Based Violence, GEM: Gender Equitable Men, HIV: Human
430 Immunodeficiency Virus, SPSS: Statistical Package for Social Science, WHO: World Health
431 Organization

432 **Acknowledgments**

433 First and foremost, we would like to extend our deepest gratitude and appreciation to Arba
434 Minch College of Health Sciences for the facilitation and support of the study. Our deepest
435 gratitude goes to Arba Minch and Jinka University for their unreserved cooperation during data
436 collection. We are also grateful to the study participants and data collectors. The preprint of this
437 article can be found on R square by the following link [https://doi.org/10.21203/rs.3.rs-3440056/v1\(38\)](https://doi.org/10.21203/rs.3.rs-3440056/v1(38)).

438 **Author Contributions**

439 Yirgalem Tola Kelecha and Temesgen Mohammed Toma conceived the study and were involved
440 in the design, developed the tool, execution, and acquisition of data, carried out the data analysis
441 and interpretation, report writing, and drafted and revised the manuscript. Amanuel Albene
442 Ayele, Habtamu Samuel, and Mesarch Hailu were involved in the conception, design, and data
443 analysis. All authors contributed to data analysis, drafting, and revising the paper and agreed to
444 be accountable for all aspects of the work. All authors read and approved the final manuscript.

445 **Funding**

446 This research received no specific grant from any funding agency in the public, commercial or
447 not-for-profit sectors.

448 **Availability of the data and materials**

449 The data used to support the findings will be available from the corresponding author upon
450 reasonable request.

451 **Declaration**

452 **Ethical Approval and consent to Participate**

453 This study was carried out after obtaining ethical clearance from the Arba Minch College of
454 Health Sciences institutional research ethics review board with a reference number of
455 AMCHS/27/1897. The study was conducted following the Declaration of Helsinki on health
456 research. A formal letter of cooperation was written to Arba Minch and Jinka University from
457 Arba Minch College of Health Sciences. Official permission was obtained from Arba Minch and
458 Jinka University and their respective departments before conducting the study. Individual written
459 informed consent was obtained before the questionnaire was delivered to each participant aged
460 ≥ 18 years after explaining the purpose and procedure of the study, the importance of their
461 participation, the benefits, and risks associated with the study, and the right to refuse to give
462 consent and withdraw from the study at any time if they feel discomfort. Throughout the process
463 of the study, no personal identifiers were included in the data, to maintain the confidentiality of
464 the information, privacy, and anonymity.

465 **Consent for publication**

466 Not applicable.

467 **Conflicts of interest**

468 The authors declare that they have no competing interests to disclose.

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479 **References**

- 480 1. Barker G, Ricardo C, Nascimento M, Organization WH. Engaging men and boys in changing
481 gender-based inequity in health: Evidence from programme interventions: World Health Organization;
482 2007.
- 483 2. Pulerwitz J, Barker G, Segundo M. Promoting healthy relationships and HIV/STI prevention for
484 young men: Positive findings from an intervention study in Brazil. Horizons Research Update. 2004.
- 485 3. Pulerwitz J, Martin S, Mehta M, Castillo T, Kidanu A, Verani F, et al. Promoting gender equity for
486 HIV and violence prevention: results from the male norms initiative evaluation in Ethiopia. Washington,
487 DC: PATH. 2010.
- 488 4. Nussbaum MC. Women's bodies: Violence, security, capabilities. Journal of Human
489 Development. 2005;6(2):167-83.
- 490 5. Gottert A. Gender norms, masculine gender-role strain, and HIV risk behaviors among men in
491 rural South Africa. 2014.
- 492 6. Hardee K, Kumar J, Newman K, Bakamjian L, Harris S, Rodríguez M, et al. Voluntary, human
493 rights-based family planning: A conceptual framework. Studies in family planning. 2014;45(1):1-18.

- 494 7. Khan A. Gender-based violence and HIV: a program guide for integrating gender-based violence
495 prevention and response in PEPFAR programs. Arlington, VA: USAID's AIDS Support and Technical
496 Assistance Resources, AIDSTAR-One, Task Order. 2011;1.
- 497 8. ICF CSACE. Ethiopia demographic and health survey 2016. . CSA and ICF. 2017.
- 498 9. Mbonye M, Nalukenge W, Nakamanya S, Nalusiba B, King R, Vandepitte J, et al. Gender inequity
499 in the lives of women involved in sex work in Kampala, Uganda. *Journal of the international AIDS society*.
500 2012;15:17365.
- 501 10. Gibbs A. Tackling gender inequalities and intimate partner violence in the response to HIV:
502 moving towards effective interventions in Southern and Eastern Africa. *African Journal of AIDS Research*.
503 2016;15(2):141-8.
- 504 11. Palermo T, Chzhen Y, Balvin N, Kajula L, Tanzania Adolescent Cash Plus Evaluation T.
505 Examining determinants of gender attitudes: evidence among Tanzanian adolescents. *BMC Womens
506 Health*. 2020;20(1):195.
- 507 12. Carter M. Gender Socialization and Identity Theory. *Social Sciences*. 2014;3(2):242-63.
- 508 13. Barker G, Ricardo C, Nascimento M, Olukoya A, Santos C. Questioning gender norms with men
509 to improve health outcomes: evidence of impact. *Glob Public Health*. 2010;5(5):539-53.
- 510 14. Pulerwitz J, Hughes L, Mehta M, Kidanu A, Verani F, Tewolde S. Changing Gender Norms and
511 Reducing Intimate Partner Violence: Results From a Quasi-Experimental Intervention Study With Young
512 Men in Ethiopia. *American Journal of Public Health*. 2015;105(1):132-7.
- 513 15. Lusey H, San Sebastian M, Christianson M, Edin KE. Prevalence and correlates of gender
514 inequitable norms among young, church-going women and men in Kinshasa, Democratic Republic of
515 Congo. *BMC Public Health*. 2018;18(1):887.
- 516 16. Semahegn A, Torpey K, Manu A, Assefa N, Ankomah A. Adapted tool for the assessment of
517 domestic violence against women in a low-income country setting: a reliability analysis. *International
518 journal of women's health*. 2019;11:65.
- 519 17. Middlestadt S, Pulerwitz J, Nanda G, Acharya K, Lombardo B. Gender norms as a key factor that
520 influences SRH behaviors among Ethiopian men, and implications for behavior change programs.
521 Washington: Academy for Educational Development. 2007.

- 522 18. Nanda G. Compendium of Gender Scales. Washington, DC: FHI 360/C-Change. 2011.
- 523 19. Kagesten A, Gibbs S, Blum RW, Moreau C, Chandra-Mouli V, Herbert A, et al. Understanding
524 Factors that Shape Gender Attitudes in Early Adolescence Globally: A Mixed-Methods Systematic
525 Review. PLoS One. 2016;11(6):e0157805.
- 526 20. Chae S, Haberland N, McCarthy KJ, Weber AM, Darmstadt GL, Ngo TD. The Influence of
527 Schooling on the Stability and Mutability of Gender Attitudes: Findings From a Longitudinal Study of
528 Adolescent Girls in Zambia. J Adolesc Health. 2020;66(1S):S25-S33.
- 529 21. Deole SSZ, Tugba Does education predict gender role attitudes?: Evidence from European
530 datasets. GLO Discussion Paper, No 793, Global Labor Organization (GLO), Essen. 2021.
- 531 22. ÇiMen ÖF, Bulut SerİN N. University Students' Attitudes Towards Gender Roles Predicting Their
532 Value Orientation. Participatory Educational Research. 2021;8(4):171-85.
- 533 23. METHOD KAZAURA1* ME, DERECK CHITAMA1 and ERIC MLANG'A2. Gender equitable men's
534 attitudes and beliefs to reduce HIV risk and genderbased violence in Tanzania. Tanzania Journal of
535 Health Research. 2015;17(1).
- 536 24. Pessin L. Changing Gender Norms and Marriage Dynamics in the United States. J Marriage Fam.
537 2018;80(1):25-41.
- 538 25. Gender Roles and Marriage: A Fact Sheet. [www.healthymarriageinfo.org/national health marriage
539 resource centre](http://www.healthymarriageinfo.org/national-health-marriage-resource-centre)
- 540 26. Fine SL, Kane JC, Murray SM, Skavenski S, Munthali S, Mwenge M, et al. The Role of Violence
541 Acceptance and Inequitable Gender Norms in Intimate Partner Violence Severity Among Couples in
542 Zambia. J Interpers Violence. 2021;36(19-20):NP10744-NP65.
- 543 27. Gilbert LK, Annor FB, Kress H. Associations Between Endorsement of Inequitable Gender Norms
544 and Intimate Partner Violence and Sexual Risk Behaviors Among Youth in Nigeria: Violence Against
545 Children Survey, 2014. J Interpers Violence. 2022;37(11-12):NP8507-NP33.
- 546 28. Judith Nalukwago RC, Bart van den Borne, Paul Mukisa Bukuluki, Leonard Bufumbo, Holly
547 McClain Burke, Samuel Field, Amos Zikusooka, Anne Akia Fiedler and Jane Alaii. Gender norms
548 associated with adolescent sexual behaviours in Uganda. . International Social Science 2019.

- 549 29. Messersmith LJ, Halim N, Steven Mzilangwe E, Reich N, Badi L, Holmes NB, 2nd, et al.
550 Childhood Trauma, Gender Inequitable Attitudes, Alcohol Use and Multiple Sexual Partners: Correlates of
551 Intimate Partner Violence in Northern Tanzania. *J Interpers Violence*. 2021;36(1-2):820-42.
- 552 30. Maureen Murphy NJ, Workneh Yadete & Sarah Baird Gender-norms, violence and adolescence:
553 Exploring how gender norms are associated with experiences of childhood violence among young
554 adolescents in Ethiopia. *An International Journal for Research*. 2021.
- 555 31. Amin A, Kagesten A, Adebayo E, Chandra-Mouli V. Addressing Gender Socialization and
556 Masculinity Norms Among Adolescent Boys: Policy and Programmatic Implications. *J Adolesc Health*.
557 2018;62(3S):S3-S5.
- 558 32. Julie Pulerwitz GB. Measuring Attitudes toward Gender Norms among Young Men in Brazil. *Men
559 and Masculinities* Volume 2015;10 (3):322-38.
- 560 33. Kemigisha E, Nyakato VN, Bruce K, Ndaruhutse Ruzaaza G, Mlahagwa W, Ninsiima AB, et al.
561 Adolescents' Sexual Wellbeing in Southwestern Uganda: A Cross-Sectional Assessment of Body Image,
562 Self-Esteem and Gender Equitable Norms. *Int J Environ Res Public Health*. 2018;15(2).
- 563 34. Amal El Kharouf ND. Gender Role Attitudes among Higher Education Students in Jordan.
564 *Mediterranean Journal of Social Sciences*. 2019.
- 565 35. Landry M, Vyas A, Malhotra G, Nagaraj N. Adolescents' development of gender equity attitudes
566 in India. *International Journal of Adolescence and Youth*. 2019;25(1):94-103.
- 567 36. Hendy HM, Can SH, Joseph LJ, Scherer CR. University Students Leaving Relationships (USLR).
568 *Measurement and Evaluation in Counseling and Development*. 2017;46(3):232-42.
- 569 37. Ringrose J, Harvey L, Gill R, Livingstone S. Teen girls, sexual double standards and 'sexting':
570 Gendered value in digital image exchange. *Feminist Theory*. 2013;14(3):305-23.
- 571 38. Kelecha YT, Ayele AA, Goda HS, Demissie MH, Toma TM. 2023.
572